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MEDICATION EXCHANGE AND SHARING NETWORK PROGRAM (MESNP) INITIATIVE TO COPE WITH DRUG SHORTAGES IN THE KINGDOM OF SAUDI ARABIA (KSA).

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Introduction: Drug shortages are a major public health concern and remain a persistent problem worldwide. Nowadays, a drug shortage becomes a norm of pharmacy daily practice. Although specific and certain drug classes such as oncology medications are more vulnerable to shortages than others, there are reports from various countries indicating drug shortages of different types and classes of common and essential drugs. In such situations, pharmacists and healthcare providers forced to look for alternative approaches which may not be effective as an original treatment plan and patient safety put at risk. Kingdom of Saudi Arabia (KSA) is one of the richest and fastest growing countries in the Middle East. Despite that, KSA drug markets are not immune against drug shortages. Although exact figures are lacking, there is an emerging yet still limited number of reports about the drug shortage in KSA. At the time we conduct this project, the Saudi Food and Drug Administration (SFDA) has not yet fully activated and implemented its role in tracking drug shortages and the role of other regulatory bodies are either outdated or unknown. Healthcare is one of the main focus areas of Saudi Vision for the year 2030 which represents a comprehensive plan for the entire economic structure of Saudi Arabia. In order to ensure the Saudi vision 2030 becomes reality, we should focus on more efficient use of our current resources. Based on that, we identified innovated solution at the national level to collaborate and cope with the current situation by developing centralized Medication Exchange and Sharing Network Program (MESNP). **Methods:** A quality improvement process map method was used for this project. Baseline evaluation included a review of possible reasons and strategies to manage medication shortages, recognize potential associated safety issues, and we developed MESNP as a national novel project to cope with medication shortage utilizing a Telegram as the preferred social

media platform for group creation and communication. **Results:** Total of 500 reports received. The majority of reports (70%) were raised by the ministry of health (MOH). A number of reports constituted requests for drug supplies due to shortages (315) and reports indicating the availability of overstock items for re-distribution (185). Almost 98% of overstocking drug reports was re-distributed in which it covers 75% of drug shortage requests. **Conclusion:** We believed that this is a first national novel project aiming to cope with drug shortages. The optimistic findings of this paper were the proactive identification of and developing a framework to collect data about national drug shortages and facilitate the medication exchange and sharing between the organizations aiming to mitigate drug wastages and shortages toward better patient care which eventually will help to minimize risks and improve patients safety.

EVALUATION OF A LOWER OSMOLARITY CUT OFF FOR PERIPHERALLY INFUSED PARENTERAL NUTRITION ON THE EXTRAVASATION INCIDENCE IN NEONATES AND REDUCTION OF COMPLICATIONS.

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Introduction: To achieve maximum nutritional goals in the neonatal intensive care unit (NICU) setting, infusions of peripheral parenteral nutrition (PPN) with osmolarities above 900mOsm/L, have been common practice. Guidelines from the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) recommend a maximum osmolarity of 900mOsm/L for PPN since it is associated with a lower incidence of adverse events such as thrombophlebitis.. Osmolarity of PPN is predominantly driven by the dextrose and protein content of the solution. The components of PPN contribute to its vesicant properties such as hyperosmolarity, acidity and polarity. When PPN extravasates in neonates it can cause extensive soft tissue damage and long lasting complications. **Methods:** On March 1 st 2017, our institution revised the guidelines and protocols for PPN in NICU, based on standards of care. The osmolarity for PPN was decreased from 1100mOsm/L to 900 mOsm/L. A retrospective cohort study was conducted to assess the incidence of peripheral IV extravasations associated with PPN during a control period ranging from January 1 st 2016 to December 31 st 2017. A comparison was made to a 12-month period from March 1 st 2017 to February 28 th 2018, which started from the implementation of the new protocol for PPN in our